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July 31, 2011

Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

In Re: LightSquared modification (SAT-MOD-20101118-00239)

To Whom it May Concern:

My research group at the University of Texas at Arlington, in collaboration with other academic institutions in the US, has been using GPS to measure active deformation in Puerto Rico, the Dominican Republic, Haiti, and the US and British Virgin Islands since 1994 as well as in Nicaragua, Honduras, and El Salvador since 1998. Our research has been supported since 1994 by the US National Science Foundation, National Aeronautics and Space Administration, and the United States Geological Survey. I am currently the Principal Investigator on four active NSF awards and one NASA award, all of which use GPS/GNSS observations as a critical component within their technical plans. The data from our scientific investigations are used directly by the USGS and other federal, regional, and local agencies to quantitatively define the seismic hazard for the over 35 million people in the seismically active region of the northeastern Caribbean and Central America.

I urge the FCC and all other appropriate federal agencies to assure the public that the following issues are addressed prior to any action on the LightSquared request (Modified from the Coalition to Save our GPS. *Italic and Bold my own*):

“The FCC must make clear, and the NTIA must ensure, that LightSquared's license modification is contingent on the outcome of the mandated study unequivocally demonstrating ***that there is no interference to GPS***. The study must be comprehensive, objective, and based on correct assumptions about existing GPS uses rather than theoretical possibilities. Given the substantial pre-existing investment in GPS systems and infrastructure, and the critical nature of GPS applications, the results of studies must conclusively demonstrate that there is no risk of interference. The views of LightSquared, as an interested party, are entitled to no special weight in this process.”

“The FCC should make clear that ***LightSquared and its investors are proceeding at their own risk*** in advance of the FCC's assessment of the working group's analysis. While this is the FCC's established policy, the Commission's International Bureau failed to make this explicit in its order.”

“***Resolution of interference has to be the obligation of LightSquared, not the extensive GPS user community of millions of citizens.*** LightSquared must bear the costs of preventing interference emanating from their devices, and if there is no way to prevent interference, it should not be permitted to operate. GPS users or providers should not have to bear any of the consequences of LightSquared's actions.”

I realize that I am only a single voice and that distinguished members of the military, police and fire, search and rescue, and civil and commercial aviation communities have provided detailed written reports and oral testimony before committees in the US Congress and to the FCC, but I felt compelled to communicate my concern that the LightSquared modification request, as currently envisioned, would greatly impact my seismological and volcanological research using GPS/GNSS in particular, and the broader academic geophysical community in general.

Thank you for your consideration. If you have any questions, please feel free to contact me directly at the numbers above or by email (gmattioli@uta.edu).

Sincerely,

A handwritten signature in black ink, appearing to read 'G. S. Mattioli', with a long horizontal flourish extending to the right.

Glen S. Mattioli, Ph.D.
Professor of Earth & Env. Scis.